

ELECTRICIAN

Class Definition

Under general supervision, performs skilled work installing, altering, maintaining and repairing electrical systems, equipment, and fixtures owned by the City of Fresno.

Distinguishing Characteristics

Electrician is a skilled trades class used in the Public Utilities, Public Works and Administrative Services Departments. Incumbents install, alter, maintain, and repair electrical systems, equipment, and fixtures in various City-owned buildings, facilities, fire alarms, street lighting systems, traffic signals and pump stations. This class is distinguished from Electrician Supervisor I in that incumbents of the latter have full supervisory responsibilities. Work of the incumbent is reviewed through periodic inspection and consultation.

Typical Tasks

(This list is neither inclusive nor exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Installs conduits, wires, pull boxes, switchboards, and switches required for additions, extensions, or alterations to electrical systems.

Services, repairs, and maintains lighting, power, heating, and electronic fire alarm systems.

Installs, services, repairs, maintains, and overhauls electromechanical and solid state electronic traffic signal controllers and associated electronic equipment.

Repairs and replaces defective parts in motors, generators, pumps, storage batteries, switchboards, controllers, contactors, switches, and other fixtures and appliances.

Tests, locates, and repairs trouble in electrical circuits and equipment.

Uses aerial boom for overhead work; repairs and replaces damaged electroliers, fire alarm boxes, and junction boxes; replaces defective overhead and underground cables or other electrical facilities.

Performs preventative maintenance and repairs on 15,000 volt substations, switchgear, transformers, breakers, and distribution systems.

Installs, programs, calibrates, maintains, and repairs electronic analog and digital type equipment including programmable logic controllers, variable frequency motor drives, and process instrumentation and control equipment, including fiber optic systems.

Performs related duties as required.

Knowledge, Abilities, and Skills

Knowledge of the standard practices, materials, tools, and equipment of the electrical trade.

Knowledge of high voltage service and related equipment up to and including 15 kilovolts.

Knowledge of the occupational hazards and safety precautions of the trade.

Knowledge of local and national electrical codes.

Knowledge of solid state electronic systems, including programmable logic controllers, process instrumentation and control equipment..

Knowledge of solid state motor controllers and variable frequency drives.

Ability to read and interpret blueprints, sketches, and diagrams.

Ability to establish and maintain effective working relationships with those contacted in the performance of duties.

Skill in locating and repairing defects in electrical systems and equipment.

Skill in trouble shooting and the repair of electronic analog and digital type control equipment.

Skill in the use and care of tools and equipment of the electrical trade.

Physical strength and agility to perform arduous outdoor work.

Minimum Qualifications

Completion of a recognized apprenticeship program, or equivalent, and one year of journey-level experience as an Electrician in an industrial setting performing trouble shooting and a wide variety of electrical/electronic repairs and installation work.

Necessary Special Requirements

Depending upon assignment, may be required to possess a valid Class B or Class C Driver's License at time of employment and be required to maintain the appropriate license for the entire term of employment in this class.

Depending upon assignment, must possess a valid Electrician's Certificate of Competency issued by the City of Fresno Board of Electrical Examiners at time of appointment and maintain a valid certificate for the entire term of employment in this class.

APPROVED: _____

Director

DATE: _____

ATS:GK:ch:10/12/98